## Claims:

1. A combination for simultaneous, separate or sequential use which comprises (a) a nitrogen mustard analogue selected from chlorambucil, chlornaphazine, estramustine, mechlorethamine, mechlorethamine oxide hydrochloride, navembichin, phenestrine, prednimustine, trofosfamide and uracil mustard and (b) 4-(4-methylpiperazin-1-ylmethyl)-N-[4-methyl-3-(4-pyridin-3-yl)pyrimidin-2-ylamino)phenyl]-benzamide having the following formula

in which the active ingredients (a) and (b) are present in each case in free form or in the form of a pharmaceutically acceptable salt.

- 2. The combination according to claim 1 which is a fixed combined pharmaceutical composition.
- 3. The combination according to claim 1 or 2 wherein (a) and (b) are present in synergistically effective amounts.
- 4. The combination according to claim 1, 2 or 3 wherein the nitrogen mustard analogue is chlorambucil.
- 5. Use of a combination according to any one of the preceding claims for the treatment of chronic lymphocytic leukemia.
- 6. Use of a combination according to any one of the preceding claims for the preparation of a medicament for the treatment of chronic lymphocytic leukemia.

- 7. The use according to claim 5 wherein leukemia is a chlorambucil-resistant chronic lymphocytic leukemia.
- 8. A method of treating a warm-blooded animal having chronic lymphocytic leukemia comprising administering to said animal a combination according any one of claims 1 or 2 in a quantity which is jointly therapeutically effective against said disease and in which the compounds can also be present in the form of their pharmaceutically acceptable salts.
- 9. The method according to claim 8 wherein (a) chlorambucil is administered at a dose of 0.2 to 0.8 mg/kg of body weight/day and (b) 4-(4-methylpiperazin-1-ylmethyl)-N-[4-methyl-3-(4-pyridin-3-yl)pyrimidin-2-ylamino)phenyl]-benzamide is administered at a dose of 50 mg to 800 mg per day.
- 10. A pharmaceutical composition comprising a quantity, which is jointly therapeutically effective against chronic lymphocytic leukemia of the combination according to claim 1 or 2 and at least one pharmaceutically acceptable carrier.
- 11. A commercial package comprising a pharmaceutical composition according to claim 10 together with instructions for simultaneous, separate or sequential use thereof in the treatment of chronic lymphocytic leukemia.
- 12. Use of 4-(4-methylpiperazin-1-ylmethyl)-N-[4-methyl-3-(4-pyridin-3-yl)pyrimidin-2-ylamino)phenyl]-benzamide in free form or in the form of a pharmaceutically acceptable salt for the manufacture of a medicament for use in combination with a nitrogen mustard analog selected from chlorambucil, chlornaphazine, estramustine, mechlorethamine, mechlorethamine oxide hydrochloride, navembichin, phenestrine, prednimustine, trofosfamide and uracil mustard for use in the treatment of chronic lymphocytic leukemia.
- 13. The use according to claim 12 wherein the nitrogen mustard analogue is chlorambucil.